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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,064

05/19/2005

Daniel Baglione

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02/22/2010

ALSTOM POWER INC.

INTELLECTUAL PROPERTY LAW DEPT.

P.O. BOX 500

WINDSOR, CT 06095

EXAMINER

WILSON, GREGORY A

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

02/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,064	Applicant(s) BAGLIONE, DANIEL	
	Examiner Gregory A. Wilson	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-87 and 89-94 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 91-93 is/are allowed.
- 6) ☐ Claim(s) 59-81, 87 and 94 is/are rejected.
- 7) ☒ Claim(s) 82-86, 89 and 90 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 59-75 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 59 has been amended to define "common wall" as having opposing sides, whereby one opposing side defines at least a portion of a wall of the reaction chamber and the other opposing side defines at least a portion of a wall of the separation chamber" however such a description was not defined in the applicants original disclosure. Applicant's discussion of the common wall is disclosed in paragraph [0022]

[0022] According to another feature, the centrifugal separator and the reaction chamber have a common wall. Because the walls of the separator are straight, like those of the reaction chamber, they can be contiguous. This wall can be a single wall or a double wall.

This newly amended limitation constitutes new matter.

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 59, 60, 62-65, 72, 77-80, 87 and 94 are rejected under 35 U.S.C. 102(e) as being anticipated by **Dietz (5,771,844)**. **Dietz** discloses a circulating fluidized bed reactor (14), a centrifugal separator (10) for separating particles from hot gases coming from the reaction chamber, wherein the reaction chamber and the centrifugal separator have a straight single common wall (Figure 3) therebetween (shown both as contiguous wall 14 and a common wall 15), an acceleration duct (12) disposed between the reaction chamber and the separator and is disposed entirely within the reaction chamber (SEE Figure 3) in the top portion of the reaction chamber, the acceleration duct has an inclined floor (12a), and an inlet curved inner wall (13) (ie: extrados) substantially parallel to the inlet mouth of the acceleration duct which aids in solids separation and reduces the inlet cyclone pressure drop.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Dietz**

(5,771,844). **Dietz** discloses the applicants primary inventive concept as stated above including the reaction chamber and the centrifugal separator having a common wall (Figure 3), however Dietz does not teach that the common wall is a double wall. It would have been an obvious matter of design choice to modify the common wall of Dietz to provide a double wall structure, since the applicant has not disclosed that having a double wall solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill. It appears that the claimed feature does not distinguish the invention over similar features in the prior art since, the common wall (single wall) of Dietz will perform the invention as claimed by the applicant.

Claims 66 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dietz (5,771,844)**. **Dietz** discloses the applicants primary inventive concept as stated above including an acceleration duct having an inlet mouth substantially parallel to the extrados of the duct, however, Dietz does not specifically teach an alternate embodiment of the inlet mouth being perpendicular to the extrados of the duct. It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the acceleration duct with an inlet mouth substantially perpendicular to the extrados of the duct since such a modification is regarded as an obvious matter of

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design choice and within the level of ordinary skill in the art and the applicant has not disclosed that having the inlet mouth of the acceleration duct substantially perpendicular to the extrados of the acceleration duct solves any stated problem or is for any particular purpose unobvious to one of ordinary skill in the art.

Response to Arguments

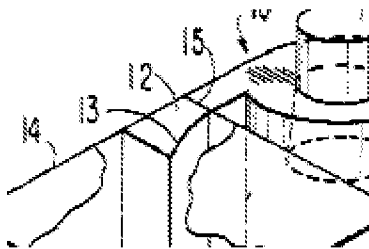
Examiner hereby acknowledges the applicants amendment to the drawings, submitted November 24, 2008 which shows a connection between the reaction chamber (1) and the separator (2) as indicated by the small line at the bottom of Figure 2, linking the two structures together. The objection to the drawings submitted in Office Action dated 3/3/09 is hereby withdrawn.

With regard to the applicants comment with regards to the omission of claim 76 from the Office Action of 3/3/09, this omission was a typographical error and the Applicant was correct to assume that claim 76 was rejected for the same reasons as independent claim 59.

Applicant's arguments, with respect to independent claim 59 have been fully considered but are not persuasive. The applicants newly amended claim 59, now defines the common wall as "having opposing sides, whereby one opposing side defines at least a portion of a wall of the reaction chamber and the other opposing side defines at least a portion of the separation chamber, however, this definition was not disclosed in the original disclosure. The original disclosure states that the centrifugal separator and the reaction chamber have a common wall, additionally, because the

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walls of the separator are straight, like those of the reaction chamber, they can be contiguous (SEE paragraph [0022]). Contiguous simply means that they are touching or in contact. As previously argued, Dietz discloses in Figure 3, a reactor furnace (14) having a common wall which extends from the reactor to the separator (10). There is no clear element number to identify the wall, but as shown in the illustration below, the element number (14) refers to the surface that the examiner regards as being part of the common wall. In addition rear wall (15) also represents a common wall between the reaction chamber and the centrifugal separator.



The Examiner respectfully asserts that Dietz anticipates the applicants limitation of a common wall and thus regards the applicants newly recited recitation as new matter.

With regards to applicants arguments as they pertain to claim 76, the applicant has now defined the invention to include the limitation that “a wall of the reaction chamber and a wall of the separation chamber of the centrifugal separator are contiguous”, arguing that Dietz shows a furnace (14) spaced from the cyclone barrel (16) of the cyclone separator (10) and is therefore not contiguous to the cyclone barrel. The Examiner submits that this is true, but they cyclone separator does not consist of just the barrel alone, but also the straight portion which is contiguous with the reaction chamber (14) of Dietz. This straight portion is also part of the wall of the cyclone separator as clearly illustrated in Figure 3 and thus anticipates the applicants structure.

Applicant's arguments with respect to Baglione et al (6,779,492) have been fully considered and are persuasive. The cited Baglione et al reference was commonly owned by Alstom (Switzerland) Ltd., at the time of the invention of the current application 10/531,064. The rejections of claims 67-71, 73-75, 82-86 and 88-93 have been withdrawn.

Allowable Subject Matter

Claims 91-93 are allowed.

Claims 82-86, 89 and 90 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A. Wilson/
Primary Examiner, Art Unit 3749
February 17, 2010